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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,906

11/20/2006

Shafidul Islam

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5419

27267

7590

07/22/2009

WIGGIN AND DANA LLP
ATTENTION: PATENT DOCKETING
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EXAMINER

PAREKH, NITIN

ART UNIT

PAPER NUMBER

2811

MAIL DATE

DELIVERY MODE

07/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,906	Applicant(s) ISLAM ET AL.	
	Examiner Nitin Parekh	Art Unit 2811	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 7-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5-30-06, 9-18-06, 10-23-08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restriction

1. Applicant's election of package claims 1-3, 5 and 6 (Embodiment 1: Fig. 1) from the device/package claims 1-12 without traverse is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi (see IDS: Japanese Pat. 20000124240).

Regarding claims 1-3, 5 and 6, Yamaguchi discloses a semiconductor device package comprising:

- a resin molding compound/RMC (26 in Fig. 6) forming a portion of a first/top package face, a second/bottom package face opposite the first/top package face and package side faces (see Fig. 4/6) extending between the first and second package faces
- a semiconductor device/die (24 in Fig. 6) at least partially covered by the RMC

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- the semiconductor device including a plurality of conventional electrodes/I/O pads (not numerically referenced in Fig. 6- see wire bond connections on the die in Fig. 6)
- the semiconductor device/die being attached to a support/die pad (see 17 in Fig. 6), the support/die pad including a bottom surface extending along the second/bottom package face
- an electrically conductive lead frame (14/17/27 in Fig. 6) comprising a plurality of leads/posts (12/27 in Fig. 6) disposed at a perimeter of the package (10, 100), each lead/post having a first contact surface (26) disposed at the first/top package face and a second contact surface (28) disposed at the second package face, the semiconductor device being positioned in a central region defined by the plurality of leads/posts
- a plurality of lead/post extensions (27 in Fig. 6), each post extension having a third/bottom contact surface (see bottom of 27 in Fig. 5/6) disposed at the second package face, the plurality of post extensions extending from the plurality of leads/posts toward the semiconductor device, each of the lead/post extensions including a bond site formed on a top surface of the post extension opposite the second/bottom package face (see wire bonding connections on 27 in Fig. 6)
- the electrodes/I/O pads being electrically connected through wire bonds (25 in Fig. 6) to the lead/post extension at respective bond site, and

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- the package having four package side faces and the plurality of posts are disposed among all of the four package side faces (see 12/27 in Fig. 4-6)

(IDS: see Fig. 4-6, Abstract with English Translation and pp. 1-8).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nit in Parekh whose telephone number is 571-272-1663. The examiner can normally be reached on 09:00AM-05:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Gurley can be reached on 571-272-1670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAN or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAG system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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/Nitin Parekh/

7-15-09

Primary Examiner, Art Unit 2811